



AM Dkt 8325-0014  
S14-US1  
PATENT

Receipt

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7/25/01  
Date

Dahna Pasternak  
Signature

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In Re Application of:

WOLFFE and COLLINGWOOD

AUG 14 2001

Serial No.: 09/844,508

Group Art Unit: 1645

TECH CENTER 1600/2900

Filing Date: April 27, 2001

Examiner: unassigned

Title: TARGETED MODIFICATION OF CHROMATIN STRUCTURE

**REQUEST FOR A CORRECTED FILING RECEIPT AND NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Please furnish the undersigned with a corrected filing receipt for the above-identified application. The corrections needed are as follows:

Under **ATTY DOCKET NO.** please replace:

"8325-0015" with --8325-0014--

Attached is a copy of the Filing Receipt and Notice to File Missing Parts of Nonprovisional Application with the correction highlighted. Also included is a copy of the Application Title Page and page 1 of the Application showing the correct ATTY DOCKET NO.

It is believed that no fee is due. If for any reason a fee is found to be necessary, our Deposit Account No. 18-1648 may be charged therefor.

Respectfully submitted,

Date: July 25, 2001

By: Dahna Pasternak  
Dahna S. Pasternak  
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ROBINS & PASTERNAK LLP  
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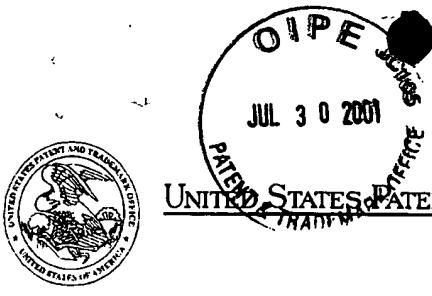
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WASHINGTON, D.C. 20231  
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/844,508	04/27/2001	1645	0.00	x8325-0015 8325-0014	7	72	4

CONFIRMATION NO. 9058

20855  
ROBINS & PASTERNAK LLP  
90 MIDDLEFIELD ROAD  
SUITE 200  
MENLO PARK, CA 94025

FILING RECEIPT



\*OC000000006245006\*

Date Mailed: 06/29/2001

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

**Applicant(s)**

Alan P. Wolffe, Orinda, CA;  
Trevor Collingwood, San Pablo, CA;

**Domestic Priority data as claimed by applicant**

THIS APPLN CLAIMS BENEFIT OF 60/200,590 04/28/2000  
AND CLAIMS BENEFIT OF 60/228,523 08/28/2000

**Foreign Applications**

**Projected Publication Date:** To Be Determined - pending completion of Missing Parts

**Non-Publication Request:** No

**Early Publication Request:** No

**Title**

Targeted modification of chromatin structure

**Preliminary Class**

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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/844,508	04/27/2001	Alan P. Wolfe	8325-0014 X0022X0014

8325-0014

CONFIRMATION NO. 9058

20855  
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FORMALITIES LETTER



\*OC000000006245007\*

Date Mailed: 06/29/2001

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

*Filing Date Granted*

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.  
*Applicant must submit \$ 710 to complete the basic filing fee and/or file a small entity statement claiming such status (37 CFR 1.27).*
- Total additional claim fee(s) for this application is \$1016.
  - \$936 for 52 total claims over 20.
  - \$80 for 1 independent claims over 3 .
- The oath or declaration is unsigned.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- **The balance due by applicant is \$ 1856.**
- This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disc copy of the "Sequence Listing", as well as an amendment directing its entry into the application. Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

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Date of Deposit APRIL 21, 2001



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Patricia K. Himes  
Typed or Printed Name of Person Mailing Paper or Fee

Patricia K. Himes  
Signature of Person Mailing Paper or Fee

Application for U.S. Letters Patent Entitled

TARGETED MODIFICATION OF  
CHROMATIN STRUCTURE

claiming priority to U.S. provisional patent applications serial nos. 60/200,590, filed April 28, 2000 and 60/228,523, filed August 28, 2000

by Inventors:

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Attorney Docket No. 8325-0014



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## TARGETED MODIFICATION OF CHROMATIN STRUCTURE

### CROSS-REFERENCE TO RELATED APPLICATIONS

5 This application claims priority under the provisions of 35 U.S.C. § 119 to U.S. Provisional Patent Application Serial No. 60/200,590, filed April 28, 2000 and U.S. Provisional Patent Application Serial No. 60/228,523, filed August 28, 2000; the disclosures of which are hereby incorporated by reference in their entireties.

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### TECHNICAL FIELD

The present disclosure is in the fields of chromatin structure and genetic regulation, in particular, the modification of chromatin structure to facilitate interaction of molecules with a region of interest in cellular chromatin.

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### BACKGROUND

Regulation of gene expression in a cell is generally mediated by sequence-specific binding of gene regulatory molecules, often proteins, to chromosomal DNA. Regulatory proteins can effect either positive or negative regulation of gene expression. Generally, a regulatory protein will exhibit preference for binding to a particular binding sequence, or 20 target site. Target sites for many regulatory proteins (and other molecules) are known or can be determined by one of skill in the art.

Despite advances in the selection and design of sequence-specific DNA binding gene regulatory proteins, their application to the regulation of an endogenous cellular gene can, in some cases, be limited if their access to the target site is restricted in the cell. 25 Possible sources of restricted access could be related to one or more aspects of the chromatin structure of the gene. Access can be influenced by the structure of the gene *per se* (e.g., nucleotide methylation) or by the structure of the chromosomal domain in which the gene resides.

Cellular DNA, including the cellular genome, generally exists in the form of 30 chromatin, a complex comprising nucleic acid and protein. Indeed, most cellular RNAs also exist in the form of nucleoprotein complexes. The nucleoprotein structure of